

## REMARKS

Claims 1-7, 10-16, 18 and 19 remain pending. Claims 8, 9, and 17 have been canceled. The Examiner is thanked for his acknowledgment that prior amendments to the claims have overcome the formality objections and rejections set forth in the first Office Action.

Claims 1-7, 10-16, 18 and 19 have been rejected by the Examiner under 35 USC 103(a) as being unpatentable over Tojo in view of Hartmann and alternatively as being unpatentable over Tojo in view of Hartmann as evidenced by Hodgson or Holt. It is noted that this rejection is essentially the same as that raised by the Examiner in the first Office Action.

It is respectfully submitted that the present invention is patentably distinct from the references cited by the Examiner. In particular, the Examiner cited Tojo as disclosing an apparatus comprising an electrolyte aerosol removal unit (14 of Fig. 1 in Tojo) but recognizes that Tojo fails to disclose the catalytic unit of the present invention. Therefore the Examiner relies on Hartmann as disclosing a catalytic unit for disposing of hydrogen and concludes that the combination of Tojo and Hartmann renders the present invention obvious. These statements and conclusions are respectfully traversed for at least the following reasons.

Contrary to the Examiner's statements, Tojo does not teach or suggest the aerosol removal unit of the present invention. In fact, nowhere does Tojo mention an aerosol component of the treated stream whatsoever. Rather, component 14 of Fig. 1 in Tojo is specifically referred to as HF absorber and used specifically to remove HF from the cathode side of fluorine gas generator (see in particular paragraph 0030 of Tojo). This is contrary to the present invention that uses an aerosol removal unit to remove the aerosol electrolyte component (generally carbon dioxide and water vapor) of the starting fluid (see in particular paragraph 0028 of the present specification).

While it is noted that an added advantage of using soda lime in the aerosol removal unit is the removal of some HF, such is not a strict requirement and further that the presence of HF in the stream is not an impediment to the operation of the catalytic unit (see in particular paragraphs 0028 – 0035 of the present specification).

The Examiner has responded to the above arguments by noting that the present claims do not specify removal of carbon dioxide and water vapor, but rather “merely specify ‘ an electrolyte aerosol removal unit ... containing an aerosol removal composition’”. In this case the Examiner is completely correct. The issue is that Tojo does not provide anything of the sort. Instead the Examiner has tried to equate the HF absorber of Tojo with the aerosol removal unit of the present invention. This is simply an incorrect comparison and it is clear that Tojo fails to teach or suggest what the Examiner has indicated. The mere fact that the use of soda lime and sodium fluoride may also remove some HF as noted in the present invention does not mean that the Tojo apparatus would remove electrolyte aerosol. The Examiner can not conveniently add components for removal to Tojo that Tojo does not mention at all, i.e. the electrolyte aerosol.

Contrary to the Examiner's statements, the catalytic unit 6 of Hartmann is not positioned in the forced convection duct 20, but rather is attached to the electrolytic cell 1 through a conduit 20. This is very different from the requirements of the present invention, as clearly defined by the present claims and as clearly depicted at least Fig. 2 and Fig. 3 of the present application. The Examiner has responded to these arguments by noting that the “catalytic unite (6) is located within the forced convection duct (20), with the force convection duct (20) being connected to both sides of the catalytic unit (6)”. This is such a complete misstatement of what is shown in Hartmann, that it deserves very little comment. It is abundantly clear that the catalytic unit of Hartmann is not “positioned inside of a forced convection duct” as required by

the present claims. The mere fact that Hartmann uses only a single reference numeral to indicate the duct can not change this fact.

The catalytic unit of Hartmann clearly represents a closed loop recirculation unit having air injected therein. The catalytic unit of 6 also represents a packed bed of platinum or palladium, possible mixed with aluminum oxide (see col. 4, lines 34-43 of Hartmann). Therefore, Hartmann requires more expensive apparatus and materials than those used in the present invention. In particular, the present invention comprises an open ventilation system utilizing the plant exhaust system, e.g. not a closed loop and not requiring air injection. Further, because of the utilization of wire screen for the combustion surface, the present invention uses considerably less precious metal material than the packed beds of Hartmann.

The mere fact that both Tojo and Hartmann may have electrolytic reactors is not enough to create the impetus for combination suggested by the Examiner. Rather, there is no teaching whatsoever in either Tojo or Hartmann that would enable the combination suggested by the Examiner.

In light of the above reasons, it is respectfully submitted that even if Tojo and Hartmann could be combined as suggested by the Examiner, that such combination would still fail to teach or suggest the particular limitation and arrangement of the present invention as expressed in amended claim 1.

The Examiner has responded to the above arguments by stating that "one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. However, it is also true that one cannot show obviousness through a combination of references without some underlying teaching or suggestion for such combination. The Examiner has utterly failed in this regard.

Further, the Examiner has missed the major point of this arguments raised, that neither Tojo nor Hartmann, taken alone or in combination teach or suggest the present invention. As has been pointed out, neither reference includes the specific components and arrangements as claimed in the present claims. Therefore, even if one skilled in the art could conceive of the combination suggested by the Examiner, it would still not result in the apparatus or method covered by the present claims.

With respect to claim 2, the statements of the Examiner that "the apparatus of Tojo appears to be modular" has no basis in anything actually presented in the Tojo reference.

With respect to claim 3, portability provides significant advantages for operation of the present invention and is certainly not contemplated by either Tojo or Hartmann.

Notwithstanding the Examiners responses to the above arguments, each of claims 2-6, 12-15 and 19 depends from claim 1 and is patentably distinct from Tojo or the combination of Tojo and Hartmann for the reasons noted above.

With respect to the use of the Holt reference, it is again noted that Holt does not overcome the deficiencies of Tojo or Hartmann. In fact, the use of Holt by the Examiner and the interpretation thereof defies logic and reason. The mere fact that Holt may disclose the use of catalyst material supported on wire screen supports can not overcome the fact that neither Tojo or Hartmann teach or suggest the use of such wire screens as required by the present claims. Once again, the Examiner is clearly using impermissible hindsight to reconstruct the present invention.

With respect to claims 16 and 18, the Examiner again relies on the combination of Tojo and Hartmann to find obviousness of the present invention. The reasoning provided by the Examiner is essentially the same as

that used for the rejection of claim 1 and therefore fails for the same reasons noted above.

In addition, claims 7, 10 and 11 depend from claim 16 and are patentably distinct from Tojo or the combination of Tojo and Hartmann for the reasons noted above.

It is respectfully requested that the rejection of claims 1-7, 10-16, 18 and 19 under 35 USC 103(a) as being unpatentable over Tojo in view of Hartmann and alternatively as being unpatentable over Tojo in view of Hartmann as evidenced by Hodgson or Holt be reconsidered in light of the above remarks and withdrawn.

In light of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and further action consistent therewith is respectfully requested.

Respectfully submitted,

/David A. Hey/

Correspondence Information  
Customer Number: 20411  
Phone: 908-771-6385  
Fax: 908-771-6159

David A. Hey  
Registration No. 32,351  
Attorney for Applicants  
Date: October 13, 2008